## OAC 3745-17-03(B) Below.

- (2) For the purpose of determining compliance with paragraph (B)(2) of rule 3745-17-07 of the Administrative Code, pertaining to visible particulate emissions from coke oven batteries:
- (a) Charging operations:
- (i) The charging period shall begin when the coal from the charging system starts to enter the oven and shall end when the last charge port lid is replaced. Such charging period shall not include the period of time during which the port lids are reopened in order to sweep spilled coal into the oven.
- (ii) The observer shall stand on the topside of the coke oven battery such that a good view of all charge ports of the oven being charged and the charging system is possible. The observer may change position to obtain a clear view of all oven ports, drop sleeves, and hoppers. During the charging period, the observer shall watch all the potential emission sources including the charge ports and the entire charging system. Upon observing the release of any visible particulate emission, an accumulative stopwatch shall be started. The watch shall be stopped when the visible particulate emission stops and shall be restarted when a visible particulate emission reappears. The observer shall continue this procedure for the entire charging period. If visible particulate emissions should occur simultaneously from several points during a charge, the visible particulate emissions shall be timed collectively as one continuous visible particulate emission. Furthermore, visible particulate emissions which may start from one source immediately after those from another source shall be timed as one continuous visible particulate emission. The following visible particulate emissions shall not be timed: steam vapor, visible particulate emissions from burning coal that is spilled on top of the oven or oven lid during charging, visible particulate emissions emitted from any equipment other than the charging system or charging ports, visible particulate emissions from closed standpipes during charging, visible particulate emissions emitted from coke oven doors which may rise above the battery and which may be windblown across its topside, and visible particulate emissions that drift from the top of the charging system, but have already been timed as a visible particulate emission from the drop sleeve below the hopper. The time recorded on the stopwatch shall represent the total time that visible particulate emissions are observed during a charge. The number of seconds of visible particulate emissions observed for each charge shall be recorded on a data sheet.
- (iii) A minimum of six consecutive charges shall be observed and the time in seconds of visible particulate emissions during such charges shall be totalled. If the observations of a set of consecutive charges is interrupted by an event not in the control of an observer, then the data for the interrupted charges shall be discarded and additional charges shall be observed until the total number of consecutive charges equals at least six. For purposes of this paragraph, charges immediately preceding and following any interrupted or discarded charges shall be deemed consecutive.
- (b) Offtake piping and charging hole lids:
- (i) The observer shall walk down the length of the top of the battery and shall complete the inspection in an expeditious manner consistent with the safety of the observer. When safety conditions permit, the

observer will walk near the center of the battery, but may deviate from this path to obtain a better view of any lid or offtake piping system. Separate traverses may be performed for offtake piping and charging hole lids. If the battery has two collector mains, the observer may make two traverses when observing visible particulate emissions from offtake piping. If an observer elects to make two traverses for a battery which has two collector mains, the observer shall inspect one collector main during the first traverse and inspect the other collector main during the second traverse. During each traverse, the observer shall record the time of the beginning and end of each traverse and the identity of any charging hole or offtake piping system having visible particulate emissions.

- (ii) Visible particulate emissions from offtake piping shall include emissions from cracks or defects in the piping, emissions from the jointure of the battery to the standpipe, emissions from the standpipe to the gooseneck and gooseneck to the collector main, emissions from the seal between the gooseneck and gooseneck lid, and emissions from opened offtake lids. Visible particulate emissions from charging holes shall include emissions from the seal between the charging hole or stationary jumper pipe lid and its casting, emissions from the charging hole or stationary jumper pipe casting/battery interface, and emissions from opened charging holes or stationary jumper pipe lids. Visible particulate emissions which shall not be included are emissions caused by maintenance work in progress at an oven, emissions caused by the vaporization of wet luting materials, emissions caused by burning or smoldering excess topside coal, and emissions from charging ports and offtake piping during the charging operation. Visible particulate emissions from open offtake piping and charging holes, from a maximum of three ovens, shall be exempt. Regardless of the number of points from which visible particulate emissions are observed from any one offtake piping system, the maximum entry for any oven with a single offtake system shall be one and the maximum entry for any oven with two offtake piping systems shall be two. The maximum number of charging hole leaks recorded for any oven shall not exceed the number of charging holes on that oven.
- (iii) The percentage of charging holes and offtake piping with visible particulate emissions shall be determined by totalling the number of charging holes or offtake piping with visible particulate emissions, including that number of opened charging holes and offtake piping with visible particulate emissions which exceeds the amount which is allowed for three ovens, dividing that number by the total number of observed charging holes or offtake piping on operating ovens, and multiplying the result by one hundred per cent. For purposes of this paragraph, any oven which is not out of service for rebuild or maintenance work that is extensive enough to require the oven to be skipped in the charging sequence shall constitute an operating oven. Further, any opened charging hole or offtake piping lids on operating ovens shall be included as observed charging holes and offtake piping.

## (c) Oven doors:

(i) The observer shall observe visible particulate emissions by completely walking around the coke oven battery at a steady distance from a position just outside the pusher machine and quencher car tracks as close to the battery as safety and visibility conditions permit. The observer shall traverse each side of a battery expeditiously, recording the time of the beginning and end of each side traverse, the identity of each door having visible particulate emissions, and the identity of any door not observable during the

traverse. A visible particulate emission from an individual door shall be noted on an inspection sheet when an observer determines any visible particulate emissions are occurring from any location on the perimeter of a coke oven door or chuck door. Visible particulate emissions observed at the top of the battery above a specific oven door but not clearly attributable to such door shall not be counted in this procedure. An observer shall observe each oven door only once while scanning the perimeter for any visible particulate emissions. After a brief scan of an oven door, the observer shall move along his/her traverse, checking subsequent doors on the battery in a like manner. If a temporary machine obstruction occurs which blocks the view of a series of ovens, the ovens shall be bypassed and the remaining oven doors on that side of the battery shall be observed. After the traverse of such side of the battery, the bypassed oven doors and only those oven doors, may be reobserved. After completing one side, the observer shall proceed directly to the opposite side of the battery and proceed to perform a like traverse while repeating the above procedures. A row of two or more continuous batteries may be inspected by observing all of the pusher side doors and then all of the coke side doors.

- (ii) The percentage of oven doors with visible particulate emissions shall be determined by totalling the number of doors with visible particulate emissions, dividing that sum by the total number of observed doors on operating ovens, and multiplying the result by one hundred per cent. For purposes of this paragraph, any oven which is not out of service for a rebuild or maintenance work that is extensive enough to require that oven to be skipped in the charging sequence shall constitute an operating oven. Further, any doors that are removed from operating ovens shall constitute unobserved doors.
- (d) For any pushing operations, visible particulate emissions shall be determined according to USEPA method 9 with the following modifications:
- (i) Paragraph 2.5 ("Data Reduction") of USEPA method 9 shall not be used; and
- (ii) Visible particulate emission readings shall be recorded at fifteen-second intervals during each pushing operation observed and the average reading during each such operation shall be determined by summing the opacity readings and dividing this sum by the number of observations during that pushing operation.